



## Technical Information

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High Performance Fillers  
for plastic recyclates

*Hidden inside – Performance outside!*



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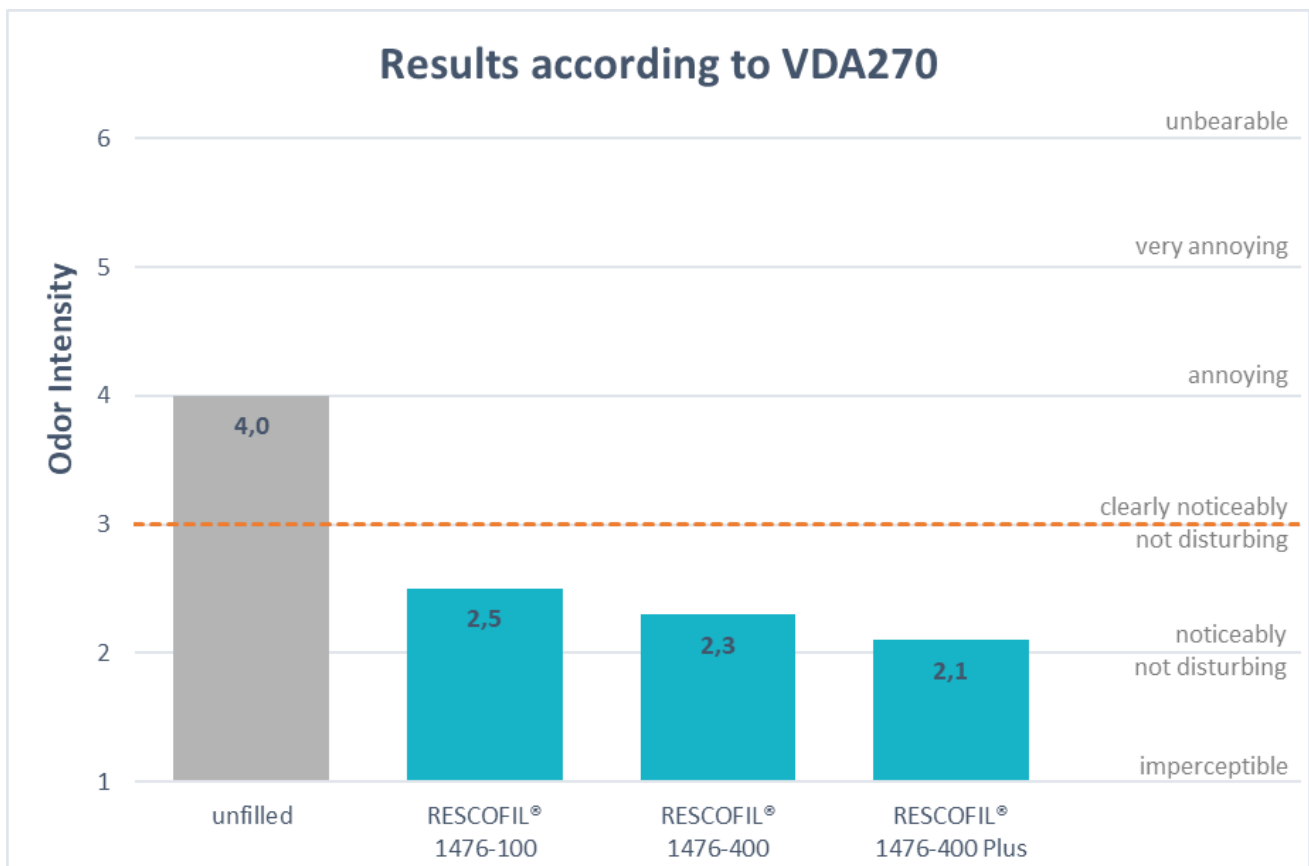
## INTRODUCTION

The marketability of certain materials is increasingly determined not only by price and performance aspects, but now also by criteria such as sustainability and resource efficiency. Today, global initiatives such as the circular economy concept as well as current national policies demand an increase in recycling rates by using high quality recyclates in new products. However, contaminated plastics from mixed post-consumer packaging waste represent a major environmental important barrier to the circular economy, as existing cleaning and recycling processes often fail to achieve the level of quality required by the industry. In addition to the mechanical and processing properties, complaints are increasingly focused on the odor profile of the recyclates.

## RESULTS & DISCUSSION

Our novel high-performance fillers were compounded with 5% by weight into a post-consumer polypropylene recyclate using a twin-screw extruder. The resulting product was subjected to olfactometric testing in conformity with the VDA270 standard. The results show that the addition of our products significantly reduces the odor intensity of the recyclate to levels considerably below the threshold value of 3 where it reaches a non-disturbing character.

Abb. 1: Results of the olfactometric test – unfilled vs. 5 wt. % High-Performance Filler



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